

STEAP4 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58574

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q687X5
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51981
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human STEAP4
Epitope Specificity	81-180/459
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane. Golgi apparatus membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the STEAP family.
SUBUNIT	Interacts with and phosphorylates PTK2/FAK1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Metalloreductase that has the ability to reduce both Fe(3+) to Fe(2+) and Cu(2+) to Cu(1+). Uses NAD(+) as acceptor. Play a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (By similarity). Associated with obesity and insulin-resistance. Involved in inflammatory arthritis, through the regulation of inflammatory cytokines. Inhibits anchorage-independent cell proliferation.

Additional Information

Gene ID	79689
Other Names	Metalloreductase STEAP4, 1.16.1.9, Six-transmembrane epithelial antigen of prostate 4, SixTransMembrane protein of prostate 2, Tumor necrosis factor, alpha-induced protein 9, STEAP4, STAMP2 {ECO:0000303 PubMed:15897894}, TNFAIP9
Target/Specificity	Ubiquitous. Highly expressed in adipose tissue. Expressed in placenta, lung, heart and prostate. Detected at lower levels in liver, skeletal muscle, pancreas, testis and small intestine. Highly expressed in joints of patients with rheumatoid arthritis and localized with CD68 cells, a marker for macrophages.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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Protein Information

Name	STEAP4
Synonyms	STAMP2 {ECO:0000303 PubMed:15897894}, TN
Function	Integral membrane protein that functions as a NADPH-dependent ferric-chelate reductase, using NADPH from one side of the membrane to reduce a Fe(3+) chelate that is bound on the other side of the membrane. Mediates sequential transmembrane electron transfer from NADPH to FAD and onto heme, and finally to the Fe(3+) chelate (PubMed: 30337524). Can also reduce Cu(2+) to Cu(1+) (By similarity). Plays a role in systemic metabolic homeostasis, integrating inflammatory and metabolic responses (By similarity). Associated with obesity and insulin-resistance (PubMed: 18381574 , PubMed: 18430367). Involved in inflammatory arthritis, through the regulation of inflammatory cytokines (PubMed: 19660107). Inhibits anchorage-independent cell proliferation (PubMed: 19787193).
Cellular Location	Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein
Tissue Location	Ubiquitous. Highly expressed in adipose tissue. Expressed in placenta, lung, heart and prostate. Detected at lower levels in liver, skeletal muscle, pancreas, testis and small intestine Highly expressed in joints of patients with rheumatoid arthritis and localized with CD68 cells, a marker for macrophages

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.